

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE
NATIONAL METEOROLOGICAL CENTER

OFFICE NOTE 234

Creating the Spectral Operational Modules

Joseph Sela
Development Division

MAY 1981

This is an unreviewed manuscript, primarily intended for informal exchange of information among NMC staff members.

This Office Note documents the method of generating operational FORTRAN source and LOAD codes from the PL 1 dependent code used in the implementation of the spectral system.

The general sequence of steps is:

1. PL 1 Preprocessor

In this step the MACDCK option is used to write the pre-processed code into SYSPUNCH. SYSPUNCH should be a source library such as NWS.NMC.PROD.SPSOURCE(Member).

2. Compile and LINK-EDIT

This step invokes the X compiler on the preprocessed code and LINKEDS with NWS.NMC.W3LIB.LOAD.

The generated load module is placed on a suitable load library. (ALOAD, BLOAD, etc.)

Users are reminded that in order to change vertical or horizontal resolution, members DCLXXXXXX, FFS99, FFA99, TRG99, and SETSIG must reflect the desired resolution.

The following modules are presented and identified in SYSPUNCH.

1. SMF3012G
2. SMF2412G
3. SMF2406G
4. SMP3012G
5. SMP2412B (SMP2412G is the O/I Post)
6. SMP2406G
7. SMP2406X
8. SMI3012G

9. SMI2412G

10. SMI3006G

11. SMG30G24

Modules named SMPXXXXF are designated for the O/I Post-processor and are generated by D.A.B.

```
//WWYSMEGA JOB (WD23008AC601000,WWB-D1),ROZWODOSKI,TIME=1,REGION=256K
//MAIN LINES=20
//FORMAT PR,CDNAME=,DEST=WWB29PRI
//PLIPRE EXEC PGM=IEMAA,
//      PARM='M,NS,NLD,NC,NS2,SM=(2,72,1),LC=78,FE,MACDCK'
//SYSPRINT DD DUMMY
//SYSUT1 DD UNIT=SYSDA,SPACE=(1024,(60,60)),,CONFIG)
//SYSUT3 DD DSN=&&PLIOUT,UNIT=SYSDA,
//      SPACE=(80,(12000,500)),DISP=(NEW,PASS)
//SYSPUNCH DD LABEL=(,,,OUT),DISP=SHR,
//      DSN=NWS.NMC.PROD.SPSOURCE(SMF3012G)
//SYSLIN DD DUMMY
//SYSLIB DD DSN=W.NWS.W323.YS.MET1,DISP=SHR
//      DD DSN=W.NWS.W323.YS.FFTS,DISP=SHR
//      DD DSN=W.NWS.W323.YS.MET2,DISP=SHR
//      DD DSN=W.NWS.W323.YS.FORT,DISP=SHR
//SYSIN DD *
% INCLUDE DCL30K12;
% #DT='1029.';
% #FILTA = '0.92' ;
%INCLUDE GCOMINI;
%INCLUDE GMAIN;
%INCLUDE GIO;
%INCLUDE GLOCUP;
%INCLUDE GFIDI;
%INCLUDE GWATER;
%INCLUDE FFSSUJ30;    %INCLUDE FFA99UJ30;    %INCLUDE TRG99UJ30;
INCLUDE SHCWHR;
INCLUDE GLATS;
INCLUDE NEWSIG;
INCLUDE AMFMFM;
INCLUDE BMCM;
INCLUDE FILTDAMP;
INCLUDE SICKD;
INCLUDE SIECKD;
INCLUDE LRGSCL;
INCLUDE CONVEC;
INCLUDE FIXTET;
INCLUDE NPMSTADE;
INCLUDE NPSATVAP;
INCLUDE NPSATVPI;
INCLUDE PRMFLLD;
INCLUDE PRINTA;
INCLUDE YSMINV;
INCLUDE MINMAX;
INCLUDE YSFLNB;
INCLUDE YSFLNF;
*
//EXEC XFORXCL,FXPOPT=3,
//      FXPTERM=TERM,
//      FXPLINE=78,FXPL='XL',PARM=LKED='LET,LIST,MAP',
//FORT.SYSIN DC DSN=&&PLIOUT,DISP=(OLD,DELETE)
//LKED.SYSLIB DD
//      DD DSN=NWS.NMC.W3LIB.LOAD,DISP=SHR
//LKED.SYSLMOD DD DISP=SHR,SPACE=,DSN=W.NWS.W323.YS.G30K12(SMF3012G)
```

```
///WWYSMEGA JOB (WD23008AC601000,WWB-D1),ROZWODOSKI,TIME=1,REGION=256K
//MAIN LINES=20
//FORMAT PR,CDNAME=,DEST=WWB29PR1
//BLIPRE EXEC PGM=IEMAA,
//      PARM='M,NS,NLD,NC,NS2,SM=(2,72,1),LC=78,FE,MACDCK'.
//SYSPRINT DD *DUMMY
//SYSUT1 DD UNIT=SYSDA,SPACE=(1024,(60,60)),CONTIG
//SYSUT3 DD DSN=&&PLIOUT,UNIT=SYSDA,
//      SPACE=(80,(12000,500)),DISP=(NEW,RASS)
//SYSPUNCH DD LABEL=(,,,OUT),DISP=SHR,
//      DSN=NWS.NMC.PROD.SPSOURCE(SMF2412G)
//SYSLIN DD DUMMY
//SYSLIB DD DSN=W.NWS.W323.YS.MET1,DISP=SHR
//      DD DSN=W.NWS.W323.YS.MET2,DISP=SHR
//      DD DSN=W.NWS.W323.YS.FFTS,DISP=SHR
//      DD DSN=W.NWS.W323.YS.FORT,DISP=SHR
//SYSIN DD *
%INCLUDE DCL24K12;
%#DT='1545.';
%#FTLTA      ='0.92' ;
%INCLUDE GCOMINI;
%INCLUDE GMAIN;
%INCLUDE GIO;
%INCLUDE GLOCP;
%INCLUDE GFIDI;
%INCLUDE GWATER;
%INCLUDE FFSS9J24;    %INCLUDE FFA99J24;    %INCLUDE TRG99J24;
%INCLUDE SHCWR;
%INCLUDE GLATS;
%INCLUDE NEWSIG;
%INCLUDE AMEMTM;
%INCLUDE BMCM;
%INCLUDE FILTDAMP;
%INCLUDE SICDKD;
%INCLUDE SIECKD;
%INCLUDE LRGSCCL;
%INCLUDE CONVEC;
%INCLUDE FIXTET;
%INCLUDE NPMSTADE;
%INCLUDE NPSATVAP;
%INCLUDE NPSATVPI;
%INCLUDE PRMFLD;
%INCLUDE PRINTA;
%INCLUDE YSMINV;
%INCLUDE MINMAX;
%INCLUDE YSFLNB;
%INCLUDE YSPLNF;
*
//EXEC XFORXCL,FXPOPT=3,
//      FXPTERM=TERM,
//      FXPLINE=78,FXPL='XL',PARM=LKED='LET,LIST,MAP'
//FORT.SYSIN DD DSN=&&PLIOUT,DISP=(OLD,DELETE)
//LKED.SYSLIB DD
//      DD DSN=NWS.NMC.W3LIB.LOAD,DISP=SHR
//LKED.SYSLMOD DD DISP=SHR,SPACE=,DSN=W.NWS.W323.YS.G24K12(SMF2412B)
```

```
//WWYSMEGA JOB (WD23008AC601000,WWB-D1),ROZWODOSKI,TIME=1,REGION=256K
//*MAIN LINES=20
//*FORMAT PR,DDNAME=,DEST=WWB29PR1
//RLIPRE EXEC PGM=IEMAA,
//      PARM='M,NS,NLD,NC,NS2,SM=(2,72,1),LC=78,FE,MACDCK'
//SYSPRINT DD DUMMY
//SYSUT1 DD UNIT=SYSDA,SPACE=(1024,(60,60)),,CONTIG)
//SYSUT3 DD DSN=&&PLIOUT,UNIT=SYSDA,
//      SPACE=(80,(12000,500)),DISP=(NEW,PASS)
//SYSPUNCH DD LABEL=(,,,OUT),DISP=SHR,
//      DSN=NWS.NMC.PROC.SPSOURCE(SMF2406G)
//SYSLIN DD DUMMY
//SYSLIB DD DSN=W.NWS.W323.YS.MET1,DISP=SHR
//      DD DSN=W.NWS.W323.YS.MET2,DISP=SHR
//      DD DSN=W.NWS.W323.YS.FFTS,DISP=SHR
//      DD DSN=W.NWS.W323.YS.FORT,DISP=SHR
//SYSIN DD *
%INCLUDE DCL24K06;
%#DTE='1545.';
%#FTLTA = '0.92' ;
%INCLUDE GCOMINI;
%INCLUDE GMAIN;
%INCLUDE GIO;
%INCLUDE GLOCP;
%INCLUDE GFIDI;
%INCLUDE GWATER;
%INCLUDE FFSS9J24; %INCLUDE FF#99J24; %INCLUDE TRG99J24;
%INCLUDE SHCWHR;
%INCLUDE GLATS;
%INCLUDE SETSIG6;
%INCLUDE AMEMTM;
%INCLUDE BMCM;
%INCLUDE FILTDAMP;
%INCLUDE SICDKD;
%INCLUDE SIECKD;
%INCLUDE LRG5CL;
%INCLUDE CONVEC;
%INCLUDE FIXTET;
%INCLUDE NPMSTADE;
%INCLUDE NPSATVAP;
%INCLUDE NPSATVPI;
%INCLUDE PRMFLD;
%INCLUDE PRINTA;
%INCLUDE YSMINV;
%INCLUDE MINMAX;
%INCLUDE YSFLNB;
%INCLUDE YSFLNF;
/*
EXEC XFORXCL,EXPORT=3,
      FXPTERM=TERM,
      FXPLINE=78,FXPL='XL',PARM=LKED='LET,LIST,MAP',
      FORT.SYSIN DD DSN=&&PLIOUT,DISP=(OLD,DELETE)
      LKED.SYSLIB DD
      DD
      DD
      DD DSN=NWS.NMC.W3LIB,LOAD,DISP=SHR
      LKED.SYSLMOD DD DISP=SHR,SPACE=,DSN=W.NWS.W323.YS.G24K06(SMF2406G)
*/
```

```
//WWYSMEGA JOB (WD23008AC601000,WWB-D1),R04WODOSKI,TIME=1,REGION=256K
//**MAIN LINES=(25,C)
//FORMAT PR,DDNAME=,DEST=WWB29PRI
//PLIPRE EXEC PGM=IEMAA,
//      PARM='M,NS,NLD,NC,NS2,SM=(2,72,1),LC=78,FE,MACDCK,
//SYSPRINT DD DUMMY
//SYSUT1 DD UNIT=SYSDA,SPACE=(1024,(60,60)),,CONFIG)
//SYSUT3 DD DSN=&&PLIOUT,UNIT=SYSDA,
//      SPACE=(80,(12000,500)),DISP=(NEW,PASS)
//SYSPUNCH DD LABEL=(,,,OUT),DISP=SHR,
//      DSN=NWS.NMC.PROD.SPSOURCE(SMP3012G)
//SYSLIN DD DUMMY
//SYSLIB DD DSN=W.NWS.W323.YS.FORT,DISP=SHR
//      DD DSN=W.NWS.W323.YS.FFTS,DISP=SHR
//      DD DSN=W.NWS.W323.YS.MET1,DISP=SHR
//      DD DSN=W.NWS.W323.YS.MET2,DISP=SHR
//SYSIN DD *
//      INCLUDE DCL30K12;
//      %KPMAX='12';
//      INCLUDE PGLCFO;
//      INCLUDE RAG;
//      INCLUDE SIGIOM; %INCLUDE GETRH;
//      INCLUDE TRP2;
//      INCLUDE JSTKPMCD;
//      INCLUDE SLOLA1;
//      INCLUDE GLATS;
//      INCLUDE FFS25J35; %INCLUDE TRIG25;
//      INCLUDE YSFLNB;
//      INCLUDE YSPLNF;
//      INCLUDE PRMFLD;
//      INCLUDE YSMINV;
//      INCLUDE UVE299; %INCLUDE PLNDER;
//      INCLUDE FFSS9J30; %INCLUDE FFA99J30; %INCLUDE TRG99J30;
//      INCLUDE YSGRID;
//      INCLUDE QPFINT;
//      INCLUDE GGFOLR;
//      INCLUDE MINMAX;
//      INCLUDE SUEGRD;
//      INCLUDE SHCWHR;
//      INCLUDE W3FT05;
//      INCLUDE OPWRCL;
//*
//      EXEC XFORXCL,FXPOPT=3,
//          FXPTERM=TERM,
//          FXPLINE=78,FXPL='XL',PARM=LKED='LET,LIST,MAP',
//          FORT.SYSIN DD DSN=&&PLIOUT,DISP=(OLD,DELETE)
//          LKED.SYSLIB DD
//              DD
//              DD
//              DD DSN=NWS.NMC.W3LIB.LOAD,DISP=SHR
//          LKED.SYSLMOD DD DISP=SHR,SPACE=,DSN=W.NWS.W323.YS.G30K12(SMP3012G)
```

```

//WWYSMEGA JOB (WD23008AC601000,WWB=01),ROZWODOSKI,TIME=1,REGION=256K
// *MAIN LINES=20
// *FORMAT PR,CDNAME=,DEST=WWB29PR1
// BLIPRE EXEC PGM=IEMAA,
//          PARM='M,NS,NLD,NC,NS2,SM=(2,72,1),LC=78,FE,MACDCK,
// SYSPRINT DD DUMMY
// SYSUT1 DD UNIT=SYSDA,SPACE=(1024,(60,60)),CONTIG
// SYSUT3 DD DSN=&&PLIOUT,UNIT=SYSDA,
//          SPACE=(80,(12000,500)),DISP=(NEW,PASS)
// SYSPUNCH DD LABEL=(,,,OUT),DISP=SHR,
//          DSN=NWS.NMC.PROD.SPSOURCE(SMP2412B)
// SYSLIN DD DUMMY
// SYSLIB DD DSN=W.NWS.W323.YS.FORT,DISP=SHR
//          DD DSN=W.NWS.W323.YS.FFTS,DISP=SHR
//          DD DSN=W.NWS.W323.YS.MET1,DISP=SHR
//          DD DSN=W.NWS.W323.YS.MET2,DISP=SHR
//SYSIN DD *
// * INCLUDE DCL24K12;
// * #KPMAX='12';
// * INCLUDE PGLCPO;
// * INCLUDE RAG;
// * INCLUDE SIG1OM; %INCLUDE GETRH;
// INCLUDE TRPC;
// INCLUDE JSTFPMC0;
// INCLUDE SLOLA1;
// INCLUDE GLATS;
// INCLUDE FFS25J35; %INCLUDE TRIG25;
// INCLUDE YSPLNB;
// INCLUDE YSPLNF;
// INCLUDE PRMFID;
// INCLUDE YSMINV;
// INCLUDE UVE299; %INCLUDE PLNDR;
// INCLUDE FFSS99J24; %INCLUDE FFA99J24; %INCLUDE TRG99J24;
// INCLUDE YSGRID;
// INCLUDE QPFINT;
// INCLUDE GGFOLR;
// INCLUDE MINMAX;
// INCLUDE SUEGRD;
// INCLUDE SHCWR;
// INCLUDE W3FT105;
// INCLUDE OPWRCL;
//
// EXEC XFORXCL,FXPOPT=3,
//      FXPTERM=TERM,
//      FXPLINE=78,FXPL='XL',PARM=LKED='LET,LIST,MAP',
//      FORT.SYSIN DD DSN=&&PLIOUT,DISP=(OLD,DELETE)
//      LKED.SYSLIB DD
//                  DD
//                  DD
//      LKED.SYSLMOD DD DISP=SHR,SPACE=,DSN=W.NWS.W323.YS.G24K12(SMP2412G)
//
```

```

//WWYSMEGA JOB (WD23008AC601000,WWB-D1),ROZWODOSKI,TIME=1,REGION=256K
//*MAIN LINES=20
//*FORMAT PR,EDNAME=,DEST=WWB29PR1
//PLIPRE EXEC PGM=IEMAA,
PARM='M,NS,NLD,NC,NS2,SM=(2,72,1),LC=78,FE,MACDCK,
//SYSPRINT DD DUMMY
//SYSUT1 DD UNIT=SYSDA,SPACE=(1024,(60,60)),CONTIG
//SYSUT3 DD DSN=&&PLIOUT,UNIT=SYSDA,
SPACE=(80,(12000,500)),DISP=(NEW,RASS)
//SYSPUNCH DD LABEL=(,,,OUT),DISP=SHR,
DSN=NWS.NMC.PROD.SPSOURCE(SMP2406G)
//SYSLIN DD DUMMY
//SYSLIB DD DSN=W.NWS.W323.YS.FORT,DISP=SHR
DD DSN=W.NWS.W323.YS.FFTS,DISP=SHR
DD DSN=W.NWS.W323.YS.MET1,DISP=SHR
DD DSN=W.NWS.W323.YS.MET2,DISP=SHR
//SYSIN DD *
% INCLUDE DCL24K06;
% KPMAX='12';
% INCLUDE PGLCPO;
% INCLUDE RAG;
% INCLUDE TRP2;
% INCLUDE USTHPMCD;
% INCLUDE SIGTOM;
% INCLUDE GETRHEX;
% INCLUDE SLOLA1;
% INCLUDE GLATS;
% INCLUDE FFS25J35; %INCLUDE TRIG25;
INCLUDE YSFLNB;
INCLUDE YSPLNF;
INCLUDE PRMFID;
INCLUDE YSMINV;
INCLUDE UVZ99;
INCLUDE FFSS99J24; %INCLUDE PLINDER;
INCLUDE YSGRID;
INCLUDE QPFINT;
INCLUDE GGFCLR;
INCLUDE MINMAX;
INCLUDE SUEGRD;
INCLUDE SHCWHR;
INCLUDE W3FT05;
INCLUDE OPWRCL;
*
EXEC XFORXCL,EXPORT=3,
FXPTERM=TERM,
FXPLINE=78,FXPL='XL',PARM=LKED='LET,LIST,MAP'
//FORT.SYSIN DD DSN=&&PLIOUT,DISP=(OLD,DELETE)
LKED.SYSLIB DD
//          DD
//          DD
//          DSN=NWS.NMC.W3LIB.LOAD,DISP=SHR
LKED.SYSLMOD DD DISP=SHR,SPACE=,DSN=W.NWS.W323.YS.G24K06(SMP2406G)

```

```
//WWYSMEGA JOB (WD23008AC601000,WWB-D1),ROZWODOSKI,TIME=1,REGION=256K
// *MAIN LINES=20
// *FORMAT PR,EDNAME=,DEST=WWB29PR1
// PLIPRE EXEC PGM=IEMAA,
//          PARM='M,NS,NLD,NC,NS2,SM=(2,72,1),LC=78,FE,MACDCK'
// SYSPRINT DD DUMMY
// SYSUT1 DD UNIT=SYSDA,SPACE=(1024,(60,60)),,CONTIG)
// SYSUT3 DD DSN=&&PLIOUT,UNIT=SYSDA,
//          SPACE=(80,(12000,500)),DISP=(NEW,PASS)
// SYSPUNCH DD LABEL=(,,,OUT),DISP=SHR,
//          DSN=NWS.NMC.PROD.SPSOURCE(SMP2406X)
// SYSLIN DD DUMMY
// SYSLIB DD DSN=W.NWS.W323.YS.FORT,DISP=SHR
//          DD DSN=W.NWS.W323.YS.FFTS,DISP=SHR
//          DD DSN=W.NWS.W323.YS.MET1,DISP=SHR
//          DD DSN=W.NWS.W323.YS.MET2,DISP=SHR
// SYSIN DD *
// %INCLUDE DCL24K06;
// %#KPMAX='12';
// %INCLUDE PGLOCPOX;
// %INCLUDE SIGTOM;
// %INCLUDE GETRHEX;
// %INCLUDE SLOLA1;
// %INCLUDE GLATS;
// %INCLUDE FFS25J35; %INCLUDE TRIG25;
// %INCLUDE YSPLNFB;
// %INCLUDE YSPLNF;
// %INCLUDE PRNFLD;
// %INCLUDE YSMINV;
// %INCLUDE UVEZ99; %INCLUDE PLNDER;
// %INCLUDE FFSS9J24; %INCLUDE FFA99J24; %INCLUDE TRG99J24;
// %INCLUDE YSGRID;
// %INCLUDE QPFINT;
// %INCLUDE GGFOLR;
// %INCLUDE MINMAX;
// %INCLUDE SUEGRD;
// %INCLUDE SHCWHR;
// %INCLUDE W3FT05;
// %INCLUDE OPWRCL;
// * EXEC XFORXCL,FXPOPT=3,
//       FXPTERM=TERM,
//       FXPLINE=78,FXPL='XL',PARM=LKED='LET,LIST,MAP',
//       FORT.SYSIN DD DSN=&&PLIOUT,DISP=(OLD,DELETE)
//       LKED.SYSLIB DD
//          DD
//          DD
//          DD DSN=NWS.NMC.W3LIB.LOAD,DISP=SHR
//       LKED.SYSLMOD DD DISP=SHR,SPACE=,DSN=W.NWS.W323.YS.LOADSR(SMR2406X)
//
```

```
//WWYSMEGA JOB (WD23008AC601000,WWB-D1),ROZWODOSKI,TIME=1,REGION=256K
//**MAIN LINES=20
//**FORMAT PR,DDNAME=,DEST=WWB29PR1
//&LIPRE EXEC PGM=IEMAA,
//          PARM='M,NS,NLD,NC,NS2,SM=(2,72,1),LC=78,FE,MACDCK,
//SYSPRINT DD DUMMY
//SYSUT1 DD UNIT=SYSDA,SPACE=(1024,(60,60)),,CONTIG)
//SYSUT3 DD DSN=&&PLIOUT,UNIT=SYSDA,
//          SPACE=(80,(1400,500)),DISP=(NEW,RASS)
//SYSPUNCH DD LABEL=(,,,OUT),DISP=SHR,
//          DSN=NWS.NMC.PROD.SPSOURCE(SMI3012G)
//SYSLIN DD DUMMY
//SYSLIB DD DSN=W.NWS.W323.YS.MET1,DISP=SHR
//          DD DSN=W.NWS.W323.YS.FFTS,DISP=SHR
//          DD DSN=W.NWS.W323.YS.FORT,DISP=SHR
//SYSIN DD *
//          INCLUDE DCL30K12;
//          INCLUDE GPRENODI;
//          INCLUDE GHCIIGGLN;
//          INCLUDE JSFTOSIG;
//          INCLUDE NESSIG;
//          INCLUDE YSFNLNB;
//          INCLUDE GLATS;
//          INCLUDE LOITMP;
//          INCLUDE PRMFLLD;
//          INCLUDE YSMINV;
//          INCLUDE FFSS99J30;      %INCLUDE FFA99J30;      %INCLUDE TRG99J30;
//          INCLUDE UVZ99;        % INCLUDE PLNDR;
/*
// EXEC XFORXCL,FXPOPT=3,
//       FXPTERM=TERM,
//       FXPLINE=78,FXPL='XL',PARM=LKED='LET,LIST,MAP',
//       FORT.SYSIN DD DSN=&&PLIOUT,DISP=(OLD,DELETE)
// LKED.SYSLIB DD
//               DD
//               DD
//               DD DSN=NWS.NMC.W3LIB.LOAD,DISP=SHR
// LKED.SYSLMOD DD DISP=SHR,SPACE=,DSN=W.NWS.W323.YS.G30K12(SMI3012G)
```

```
//WWYSMEGA JOB (WD23008AC601000,WWB=01),ROZWODOSKI,TIME=1,REGION=256K
// *MAIN LINES=20
// *FORMAT PR,LDNAME=,DEST=WWB29PR1
// PLIPRE EXEC PGM=IEMAA,
//          PARM='M,NS,NLD,NC,NS2,SM=(2,72,1),LC=78,FE,MACDCK,
// SYSPRINT DD 'DUMMY'
// SYSUT1 DD UNIT=SYSDA,SPACE=(1024,(60,60)),,CONTIG)
// SYSUT3 DD DSN=&&PLIOUT,UNIT=SYSDA,
//          SPACE=(80,(12000,500)),DISP=(NEW,PASS)
// SYSPUNCH DD LABEL=(,,,OUT),DISP=SHR,
//          DSN=NWS.NMC.PROD.SPSOURCE(SMI2412G)
// SYSLIN DD 'DUMMY'
// SYSLIB DD DSN=W.NWS.W323.YS.MET1,DISP=SHR
//          DD DSN=W.NWS.W323.YS.FFTS,DISP=SHR
//          DD DSN=W.NWS.W323.YS.FORT,DISP=SHR
// SYSIN Dd *
// % INCLUDE DCL24K12;
// % INCLUDE GPRENODI;
// % INCLUDE GHCGIGGLN;
// % INCLUDE JSPTOSIG;
// % INCLUDE NEWSIG;
// % INCLUDE YSPLNBB;
// % INCLUDE GLATS;
// % INCLUDE LOWTMP;
// % INCLUDE PRMFLLD;
// % INCLUDE YSMINV;
// % INCLUDE FFSS99J24;      %INCLUDE FFA99J24;      %INCLUDE TRG99J24;
// % INCLUDE UVC299;        % INCLUDE PLNDER;
/*
// EXEC XFORXCL,FXPOPT=3,
//       FXPTERM=TERM,
//       FXPLINE=78,FXPL='XL',PARM=LKED='LET,LIST,MAP',
// FORT.SYSIN DD DSN=&&PLIOUT,DISP=(OLD,DELETE)
// LKED.SYSLIB DD
//              DD
//              DD
//              DD DSN=NWS.NMC.W3LIB.LOAD,DISP=SHR
// LKED.SYSLMOD DD DISP=SHR,SPACE=,DSN=W.NWS.W323.YS.G24K12(SMI2412G)
```

```
//WWYSMEGA JOB (WD23008AC601000,WWB-D1),R04WODOSKI,TIME=1,REGION=256K
// *MAIN LINES=20
// *FORMAT PR,CDNAME=,DEST=WWB29PR1
// PLIPRE EXEC PGM=IEMAA,
// PARM='M,NS,NLD,NC,NS2,SM=(2,72,1),LC=78,FE,MACDCK,
// SYSPRINT DD DUMMY
// SYSUT1 DD UNIT=SYSDA,SPACE=(1024,(60,60)),CONTIG
// SYSUT3 DD DSN=&&PLIOUT,UNIT=SYSDA,
// SPACE=(80,(12000,500)),DISP=(NEW,PASS)
// SYSPUNCH DD LABEL=(,,OUT),DISP=SHR,
// DSN=NWS.NMC.PROD.SPSOURCE(SMI3006G)
// SYSLIN DD DUMMY
// SYSLIB DD DSN=W.NWS.W323.YS.MET1,DISP=SHR
// DD DSN=W.NWS.W323.YS.FFTS,DISP=SHR
// DD DSN=W.NWS.W323.YS.FORT,DISP=SHR
// SYSIN DD *
% INCLUDE DCL30K06;
% INCLUDE GPRENODI;
% INCLUDE GHCIIGGLN;
% INCLUDE JSFTOSIG;
% INCLUDE SETSIG6;
% INCLUDE YSPLNBB;
% INCLUDE GLATS;
% INCLUDE LOWTMP;
% INCLUDE PRMFLD;
% INCLUDE YSMINV;
% INCLUDE FF99J30; %INCLUDE FFA99J30; %INCLUDE TRG99J30;
% INCLUDE UVD299; % INCLUDE PLNDER;
*
// EXEC XFORXCL,EXPOPT=3,
// FXPTERM=TERM,
// FXPLINE=78,FXPL='XL',PARM=LKED='LET,LIST,MAP'
// FORT.SYSIN DD DSN=&&PLIOUT,DISP=(OLD,DELETE)
// LKED.SYSLIB DD
// DD
// DD
// DD DSN=NWS.NMC.W3LIB.LOAD,DISP=SHR
// LKED.SYSLMOD DD DISP=SHR,SPACE=,DSN=W.NWS.W323.YS.G24K06(SMI3006G)
```

```

//WWYSMEGA JOB (WD23008AC601000,WWB=01),ROZWODOSKI,TIME=1,REGION=256K
// *MAIN LINES=(25,C)
// *FORMAT PR,DDNAME=,DEST=WWB29PR1
//PLIPRE EXEC PGM=IEMAA,
//          PARM='M,NS,NLD,NC,NS2,SM=(2,72,1),LC=78,FE,MACDCK'
//SYSPRINT DD DUMMY
//SYSUT1 DD UNIT=SYSDA,SPACE=(1024,(60,60)),,CONFIG)
//SYSUT3 DD DSN=&&PLIOUT,UNIT=SYSDA,
//          SPACE=(80,(12000,500)),DISP=(NEW,PASS)
//SYSPUNCH DD LABEL=(,,,OUT),DISP=SHR,
//          DSN=NWS.NMC.PROD.SPSOURCE(SMG30624)
//SYSLIN DD DUMMY
//SYSLIB DD DSN=W.NWS.W323.YS.FORT,DISP=SHR
//          DD DSN=W.NWS.W323.YS.MET1,DISP=SHR
//          DD DSN=W.NWS.W323.YS.MET2,DISP=SHR
//SYSIN DD *
% INCLUDE DCL30K12;
DIMENSION NUM(28),LAB(8),IDATE(4),BUF(100)
COMPLEX*8 GZ(#LN),CT(25,25)
CALL W3STRT
CALL PRMFLLD(NUM)
N1=NUM(1)
N2=NUM(2)
NTRY=0
10 CONTINUE
REWIND N1
REWIND N2
READ(N1,1D=N1)LAB
WAIT(N1,1D=N1,NUM=IB,COND=ICON)LAB
IF(ICON.EQ.3) STOP 45
WRITE(N2)LAB
C
READ(N1,1D=N1)BUF
WAIT(N1,1D=N1,NUM=IB,COND=ICON)BUF
LEVS=(IB-24)/8
NW=IB/4
WRITE(N2)(BUF(I),I=1,NW)
C
READ(N1,1D=N1)GZ
WAIT(N1,1D=N1,NUM=IB,COND=ICON)GZ
NWORD=IB/8
100 PRINT 100,LEVS,NWORD,ICON
FORMAT(1F,,LEVS=!,I2,! NWORD=Y,I4,! ICON=!,I1)
LN=#LN
JCAP1=#JCAP1
IF(NWORD.NE.LN)JCAP1=25
1 CALL TG3024(JCAP1,GZ,CT,N2)
READ(N1,1D=N1)GZ
WAIT(N1,1D=N1,NUM=IB,COND=ICON)GZ
GO TO(1,2,3),ICON
C**
ERROR
2 CONTINUE
PRINT 101,N1,ICON
101 FORMAT(1F1,'ERROR IN READING FILE!',I2,2X,!ICON=!,I1)
NTRY=NTRY+1
IF(NTRY.LT.5)GO TO 10
3 CONTINUE
C**
REACH END OF FILE
IF(ICON.EQ.3) GO TO 200
CALL W3STOP
STOP 55
200 CONTINUE
CALL W3STOP
STOP
END
SUBROUTINE TG3024(JCAP1,F,C,N2)
COMPLEX*8 F(JCAP1,JCAP1),C(25,25)
DO 1 L=1,25
DO 1 I=1,25
C(I,L)=F(I,L)
1 CONTINUE
WRITE(N2)C
RETURN
END
% INCLUDE PRMFLLD;
/*
EXEC XFORXCL,XPLOPT=3,
XPXTERM=TERM,
FXPLINE=78,FXPL='XL',PARM=LKED='LET,LIST,MAP',
FORT=SYSIN DD DSN=&&PLIOUT,DISP=(OLD,DELETE)

```

//LKED.SYSLIB DD
//LKED.SYSLIB DD
//LKED.SYSLIB DD DSN=NWS.NMC.W3LIB+LOAD,DISP=SHR
//LKED.SYSLMOD DD DISP=SHR,SPACE=,DSN=W.NWS.W323.YS.G24K12(SMG30G24)